

I claim:

1. A method of producing elastic mock human tissue products, comprising the steps of:
  - specifying a product specification comprising dimensions and a coefficient of elasticity;
  - specifying a test which measures whether said coefficient's specification is met;
  - specifying a polymer obtained by a pre-polymer and polymerizing agent therefor;
  - producing a batch of hard sugar-candy cores according to the specified dimensions and including tooling attached to the cores;
  - dipping the cores by the tooling into a mix of the pre-polymer and polymerizing agent in order to encapsulate the cores entirely and, for insurance, at least portions of the tooling;
  - partially curing the dipped cores-and-tooling concurrently with three dimensional rotation thereof;
  - further curing the rotated dipped cores-and-tooling by immersion in a bath hotter than the melting point of the hard sugar-candy cores; and
  - selecting one member of the batch for testing by the specified test and breaching the polymer encapsulation to melt and/or dissolve out the hard sugar-candy core;
  - if said selected member meets the test, then retrieving the rest of the batch, if said selected member fails because of insufficient polymer thickness, returning the rest of the batch to the step of dipping.

2. The method of claim 1 wherein said coefficient of elasticity comprises a measure of percent enlargement in response to a specified pressure increase.
3. The method of claim 2 wherein said product specification includes an inside diameter, and said coefficient of elasticity comprises a 7% to 12% increase in inside diameter in response to a 100 mm of mercury pressure increase.
4. The method of claim 1 wherein said polymer is formed by either a solvent-based pre-polymer material or a catalyst and pre-polymer combination, or both.
5. The method of claim 4 wherein said polymer comprises either a solvent-based urethane or a platinum-catalyzed silicone.
6. The method of claim 1 wherein said hard sugar-candy cores are produced from substantially sugar and water.
7. The method of claim 6 wherein said hard sugar-candy cores have a hardness ranging from about that of glass to that of softer caramel and which is characterized by nearly uniform solidness or alternatively the nearly complete absence of reversion into sugar crystals or sugar powder.
8. The method of claim 6 wherein said hard sugar-candy cores comprise about four (4) volume measures of sucrose to one (1) volume measure of water, and then less than two percent (2%) volume measure of the whole of anything else.
9. The method of claim 8 wherein anything else comprises either of corn syrup or potassium tartrate, or both.

10. The method of claim 1 wherein the step of partially curing the dipped cores-and-tooling concurrently with three dimensional rotation thereof further comprises doing so in warm air.
11. The method of claim 1 wherein the step of partially curing the dipped cores-and-tooling concurrently with three dimensional rotation thereof further comprises doing so over several hours.
12. The method of claim 1 wherein the step of further curing the rotated dipped cores-and-tooling by immersion in a bath hotter than the melting point of the hard-candy sugar cores further comprises a bath of warm water at a temperature of at least about 10°C (18°F) greater than the melting point of the hard sugar-candy.
13. The method of claim 12 wherein the step of the step of further curing the rotated dipped cores-and-tooling by immersion in a bath of warm water at a temperature of at least about 10°C (18°F) greater than the melting point of the hard sugar-candy further comprises weighting the rotated dipped cores-and-tooling for near-neutral buoyancy therein.
14. A method of producing elastic mock human tissue products, comprising the steps of:
  - specifying a polymer obtained by a pre-polymer and polymerizing agent therefor that has desired elastic properties;
  - producing a hard sugar-candy core according to specified dimensions and including tooling attached to the core;
  - dipping the core by the tooling into a mix of the pre-polymer and polymerizing agent in order to encapsulate the core entirely and, for insurance, at least a portion of the tooling;
  - partially curing the dipped core-and-tooling concurrently with three dimensional rotation thereof;

further curing the rotated dipped core-and-tooling by immersion in a bath hotter than the melting point of the hard sugar-candy core; and

breaching the polymer encapsulation to melt and/or dissolve out the hard sugar-candy core.

15. The method of claim 14 wherein said polymer is formed by either a solvent-based pre-polymer material or a catalyst and pre-polymer combination, or both.

16. The method of claim 14 wherein said hard sugar-candy core is produced from substantially sugar and water.

17. The method of claim 16 wherein said hard sugar-candy core has a hardness ranging from about that of glass to that of softer caramel and which is characterized by nearly uniform solidness or alternatively the nearly complete absence of reversion into sugar crystals or sugar powder.

18. The method of claim 16 wherein said hard sugar-candy core comprises about four (4) volume measures of sucrose to one (1) volume measure of water, and then less than two percent (2%) volume measure of the whole of anything else.

19. The method of claim 18 wherein anything else comprises either of corn syrup or potassium tartrate, or both.

20. The method of claim 14 wherein the step of further curing the rotated dipped core-and-tooling by immersion in a bath hotter than the melting point of the hard-candy sugar core further comprises a bath of warm water at a temperature of at least about 10°C (18°F) greater than the melting point of the hard sugar-candy.

21. The method of claim 20 wherein the step of the step of further curing the rotated dipped core-and-tooling by immersion in a bath of warm water at a temperature of at least about 10°C (18°F) greater than the melting point of the hard sugar-candy further comprises weighting the rotated dipped core-and-tooling for near-neutral buoyancy therein.